



### Description

- Soft-bottom, subtidal habitats consist of various percentages of sand, silt, and clay, occurring in sheltered bays and estuaries, and deeper offshore areas.
- The presence of fine-grained sediments indicates that the substrate is not exposed to significant wave or tidal energy.
- Biological resources associated with this habitat include shrimp, crabs, clams, fish, and the pelagic and benthic communities that support them (e.g., plankton, worms, amphipods, isopods).

### Predicted Oil Behavior

- This habitat is not often exposed to spilled oil. The greatest risk of exposure is from the sinking oil or the sorption of dispersed oil onto suspended sediments that are then deposited on the bottom.
- Significant natural dispersion of oil and sediments into the water column occurs only during large storms and nearshore oil spills.
- Shoreline cleanup can suspend oil and fine-grained sediments, causing deposition of oily sediments in nearshore habitats.
- Concerns about seafood contamination from dispersed oil or oiled sediments can become a significant issue. Real, potential, or fear of contamination can close seafood harvesting activities.

### Response Considerations

- Removal might be needed where significant amounts of oil have sunk and formed mats or concentrations of tarballs on the sediment surface.
- Special efforts will be needed to control suspended sediments and resuspended oil during recovery operations.
- Dispersants can be used over soft subtidal habitats in order to protect more sensitive intertidal environments. Effects on biota are less for applications in deep water or high dilution rates.
- In situ burning can be used to protect sensitive intertidal environments. When burned, some oils can produce a sinkable residue; the potential effects of these residues will depend on the composition and amount of oil to be burned.

Response Method	Oil Category				
	I	II	III	IV	V
<b>Oil Category Descriptions</b>					
I – Gasoline products					
II – Diesel-like products and light crudes					
III – Medium grade crudes and intermediate products					
IV – Heavy crudes and residual products					
V – Non-floating oil products					
Natural Recovery	A	A	A	B	B
Booming	A	A	A	A	–
Skimming	–	A	A	A	–
Physical Herding	–	B	B	B	–
Manual Oil Removal/Cleaning	–	–	B	B	B
Mechanical Oil Removal	–	–	–	C	C
Sorbents	–	A	A	A	B
Vacuum	–	–	B	B	B
Debris Removal	–	–	–	–	–
Vegetation Cutting/Removal	–	–	–	–	–
Low-pressure, Ambient Water Flushing	–	–	–	–	–
Dispersants	–	C	C	C	–
In-situ Burning	–	B	B	B	–

The following categories are used to compare the relative environmental impact of each response method in the specific environment and habitat for each oil type. The codes in each table mean:

- A = The least adverse habitat impact.
- B = Some adverse habitat impact.
- C = Significant adverse habitat impact.
- D = The most adverse habitat impact.
- I = Insufficient information - impact or effectiveness of the method could not be evaluated.
- = Not applicable.

Consult the *Environmental Considerations for Marine Oil Spill Response* document referenced on page 5 before using this table.